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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,007	03/16/2004	Leo M. Pedlow JR.	SNY-T5712.02	3328
24337 7590 07/24/2007 MILLER PATENT SERVICES 2500 DOCKERY LANE RALEIGH, NC 27606			EXAMINER CHEN, SHIN HON	
			ART UNIT 2131	PAPER NUMBER
			MAIL DATE 07/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,007	PEDLOW ET AL.	
	Examiner	Art Unit	
	Shin-Hon Chen	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4 and 11-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 11-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/9/07, 5/17/07, 6/29/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 4, 11-31 have been examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4 and 11-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colligan et al. U.S. Pat. No. 6415031 (hereinafter Colligan) in view of Nardone et al. U.S. Pat. No. 5805700 (hereinafter Nardone) and further in view of Carny et al. U.S. Pub. No. 20020150239 (hereinafter Carny).

4. As per claim 19, Colligan discloses a method of processing digital video content, wherein the digital video content comprises intra-coded frames and inter-coded frames, the method comprising: selecting a plurality of the intra-coded frames for encryption to produce selected frames (Colligan: column 11 lines 48-57: if I-Frame data is indicated, then selective encryption takes place); encrypting the selected frames under a first encryption algorithm to produce first encrypted frames (Colligan: column 7 lines 45-59: different types of encryption algorithms may be applied for encryption); storing the inter-coded frames in a first file; storing the intra-coded

frames, whether encrypted under the first encryption algorithm or unencrypted, in a second file (Colligan: column 7 lines 35-59; column 11 lines 48-57: if different types of encryptions take place, only I-frame portion of the data are different); encrypting the selected frames under a second encryption algorithm to produce second encrypted frames (Colligan: column 7 lines 35-59; column 11 lines 48-57: different algorithms may be used); storing the intra-coded frames, whether encrypted under the second encryption algorithm or unencrypted, in a third file (Colligan: column 7 lines 35-44: the data are pre-encrypted); receiving a request from a subscriber terminal for the digital content; and retrieving the content from the first file and the third file; and sending the content to the subscriber terminal. (Colligan: column 7 lines 35-44: VOD system). Colligan does not explicitly disclose that the selecting a plurality of intra-coded frames for encryption. However, Nardone discloses that limitation (Nardone: column 6 lines 34-45: only selected I-frames are selected for encryption). It would have been obvious to one having ordinary skill in the art to encrypt selected I-frames for encryption because they are analogous art. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Nardone within the system of Colligan because it reduces overhead to encrypt the entire content. Colligan as modified does not explicitly disclose duplicating the data and encrypt duplicated copies with different encryption algorithms; and determining that the subscriber is enabled for decryption of content under the first/second encryption algorithm. However, Carny discloses duplicating segments of a data and subject the copies of duplicate segments under different encryption method and combine the encrypted copies with the unencrypted segments to generate complete data and transmit the personalized encrypted data to end users (Carny: abstract; [0008] and [0018]; figure 3 and [0054]: the

personalized encrypted data is transmitted to end user to ensure the end user can use the encrypted data). It would have been obvious to one having ordinary skill in the art to encrypt the data frames under different encryption algorithms and store the duplicate copies into storage system because they are analogous art. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Carny within the combination of Colligan-Nardone because it prevents a single version of encrypted data being compromised and allow immediate transmission of data upon request without delay and able to personalize encryption method based on the end users/devices.

5. As per claim 20, Colligan as modified discloses the method of claim 19. Colligan as modified further discloses the content is retrieved from the first and third files in an order of sequential frames in the content (Nardone: column 3 lines 19-28).

6. As per claim 4, 11-18 and 21-31, claims 4, 11-18 and 21-22 encompass the same scope as claims 19-20. Therefore, claims 1-18 and 21-22 are rejected based on the same reason set forth in claims 19 and 20.

Response to Arguments

7. Applicant's arguments filed on 5/3/07 have been fully considered but they are not persuasive.

Regarding applicant's remarks, applicant argues that the prior art of record fails to disclose the claims element described. However, as explicitly described in previous office action,

Colligan reference discloses a method of encrypting intra-coded portions (I-frames) of data because without I-frame, B and P frames (inter-coded frames) cannot work (Colligan: column 11 lines 40-41). The examiner admitted that the Colligan reference does not explicitly disclose duplicating intra-coded frames and subject the duplicated frames under different encryption. However, Carny reference is relied upon to disclose generating duplicate of a segment of data and subject the duplicate under different encryption and store the encrypted duplicate copies. During transmission, the encrypted duplicate copies are re-assembled with data segments not under encryption to generate complete data (Carny: [0008] and [0018]: store the copies and combine the segments to form personalized encrypted data). Therefore, it would have been obvious to one having ordinary skill in the art to duplicate intra-coded frames and subject each copy under different algorithm and combine the encrypted intra-coded frames with inter-coded frames for transmission to users because both prior art disclose encryption of digital content to be transmitted to subscribers and applicant's argument is respectfully traversed.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

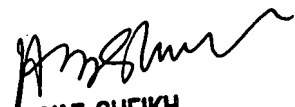
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen
Examiner
Art Unit 2131

SC


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100